GOVERNMENT OF INDIA
SPACE
LOK SABHA

STARRED QUESTION NO:342
ANSWERED ON:16.04.2008
INDIA`S ACHIEVEMENTS IN SPACE PROGRAMMES
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Will the Minister of SPACE be pleased to state:

(a) the broad achievements of the country under the Space Programme during the Tenth Five Year Plan period; and

(b) the specific details of India's efforts so far to send a satellite to moon?

Answer

MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN):

(a) & (b): A statement is laid on the table of the House.

STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY TO PARTS (a) and (b) OF STARRED QUESTION NO. 342 REGARDING "INDIA'S ACHIEVEMENTS IN SPACE PROGRAMMES" ASKED BY SHRI REWATI RAMAN SINGH FOR ANSWER ON WEDNESDAY, APRIL 16, 2008.

(a) The broad achievements of the Space Programme during the Tenth Five Year Plan are :

- 20 major space missions were accomplished.

- Growth in communication Transponders capacity from 100 to 200 exceeding the 10th Plan target of 175,

- New vistas of applications based on space technology, benefiting common man, namely, Village Resource Centres, large scale expansion of Tele-education, Tele-medicine, establishment of Natural Resources Census and Disaster Management Support,

- Imaging capability enhanced from 5.8 metre resolution to better than 1 metre resolution,

- New technologies and facilities, such as, Indigenous cryo engine/ stage, Air-breathing propulsion, Electric propulsion, Ku band communications, microwave remote sensing, Second Launch Pad, have been developed and qualified,

- For the first time a spacecraft has been launched into orbit and successfully brought back and recovered through SRE mission.

(b) Chandrayaan-1 is India's first instrumented mission to Moon to be launched by PSLV. The lift-off weight of Chandrayaan-1 will be 1304 kg and it will carry 11 scientific payloads, out of which five of them will be from India and six others from various scientific communities around the world. Chandrayaan-1 spacecraft will orbit around moon and during the 2 year mission period will provide high resolution remote sensing of the moon in a visible, near Infrared, low energy X-ray and high-energy X-ray regions. It will provide a three-dimensional atlas of the near and far side of the moon, chemical and mineralogical map of the entire lunar surface to study distribution of mineral and chemical elements.

Presently, Chandrayaan-1 mainframe system is ready for integration with various experimental payload packages. The experimental packages are being integrated on the spacecraft mainframe. After integration and initial testing, the spacecraft will be subjected to testing in the space simulation chamber and vibrational acoustic test facilities, starting from first week of May 2008. Deep space tracking network, which will control the satellite in its flight to Moon and orbiting around moon, is established by having 18m and 32m

Antenna system. The sub-systems of PSLV are being integrated to make the vehicle ready for launch of Chandrayaan-1 by third quarter of 2008.